

Water Audit Level 1 Validation- Validator Review & Certification Statement

Water System(s) This Audit Covers:

Public Water System Identification (PWSID)¹: CA 3810011

Water System Name San Francisco Public Utilities Commission

¹List only 1 PWSID which should match the PWSID on the FWAS Instructions Tab. For Special cases where the audit covers multiple water systems connected with permanent two-way interties, list those additional PWSIDs in the **Notes** below and describe the water distribution system(s) configuration.

Notes (Provided to Validator by Water System):

SFPUC takes the reporting process (and improving the tools they use to report) very seriously and are a model for other utilities to follow.

Audit Period:

Validation Date: 12/16/2021

Water System Representatives: Joan Ryan

Sufficient Supporting Documents Provided: Yes

Validation Findings & Confirmation Statement: Accept audit findings with no changes.

Key Audit Metrics:

Data Validity Score: 89 **Data Validity Band (Level):** IV

ILI 1.65

Real Loss: 23.77 gal/conn/day

Non-revenue water as percent of cost of operating system: 3.5

Apparent Loss: 6.13 gal/conn/day

Cerification Statement by Validator:

This water loss audit report has been Level 1 validated per the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34.

All recommendations on volume derivation and Data Validity Grades were incorporated into the water audit. ☒

If not, rejected recommendations are included here:

Validator Information:

Water Audit Validator: Greg Imamura

Validator Qualifications: Water Audit Validator Certificate issued by the CA-NV Section of the AWWA

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Notes:

Water Audit & Water Loss Improvement Steps:

1. Steps Taken: Water System to identify steps taken in the preceding 3 years to increase data validity, reduce real loss, and reduce apparent loss as informed by the annual validated water audit:

- >Continued small and large meter replacement through AML deployment program
- >Continued testing implementation of a semi-proactive leak detection program, including pilot programs for new leak detection equipment and technology (Echologics and Sensus)
- >Reviewed and updated assumptions used to estimate unbilled unmetered authorized consumption for firefighting and nitrification flushing, as well as capture of dead end and main flushing events
- >Developing a comprehensive, 20-year Water Loss Reduction Program to be consistent with California's Senate Bill 555, Water Loss Management

2. Planned Steps (OPTIONAL): If your audit reflects negative real losses or the cost of non-revenue water is greater than 100% of the operating costs (issues for which your audit will not meet code requirements), you will be asked what steps you are planning in the coming year to address these issues. If you already know what steps you plan to take, you may list them here. If not, please prepare a response within 90 days (23 CCR Section 638.6[a]).

N/A

Certification Statement by Utility Executive

This water loss audit report meets the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34 and has been prepared in accordance with the method adopted by the American Water Works Association, as contained in their manual, *Water Audit and Loss Control Programs, Manual M36, Fourth Edition* and in the Free Water Audit Software version 5.

Executive Name (Print)

Bill Teahan

Executive Position

Division Manager

Signature

William P. Teahan

Date

12/16/2021